SAN ANDREAS SANITARY DISTRICT

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James D. Marshall, P.E.
California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

RE: San Andreas Sanitary District Tentative Order Review

Mr. Marshall:

Herewith, the San Andreas Sanitary District (District) is providing review comments on the Tentative Order proposed to regulate the treatment and disposal of wastewater from the San Andreas Sanitary District. Overall, the District believes the Order is well crafted. We request that the following technical/policy matters be considered by Regional Water Quality Control Board (Water Board) management prior to the Tentative Order being submitted to the Water Board for approval. The Districts believes that the magnitude of the technical issues presented in this comment letter will warrant recirculation of the Tentative Order for public comment. In addition to the substantive technical comments provided in this letter, also included is a list (Attachment A) that presents what the District believes are typographic-type errors that should be corrected before the permit is adopted, though they do not impact the sum and substance of the Tentative Order.

Dilution Credits for Protection of Aquatic Life

The Tentative Order contains a prohibition of discharges of secondary treated effluent to the North Fork Calaveras River which do not receive a minimum of 20:1 dilution as a daily average. However, dilution credits were not allowed in the derivation of water quality based effluent limits for the protection of aquatic life. The Tentative Order indicates that the edge of the mixing zone in the North Fork Calaveras River has not been adequately defined by the District in the San Andreas Sanitary District Dilution/Mixing Zone Study or subsequent Dilution/Mixing Zone Study Evaluation prepared and submitted in response to a Water Board staff request. To better define the edge of the mixing zone and describe how mixing zone conditions specified in Section 1.4.2.2 of SIP are satisfied, the District has prepared a Dilution/Mixing Zone Study addendum, included as Attachment B to this letter. The District proposes that the Water Board consider the information presented in Attachment B and apply the appropriate dilution credits (D=19) for water quality based effluent

limits for copper, cyanide, zinc, ammonia and diazinon. A summary of proposed effluent limits with a dilution credit of 19 is provided in Table 1 below.

Table 1
Proposed Concentration Based Secondary Treatment Effluent Limits (with 20:1 dilution)

Parameter	Units	MEC	Effluent Limitations	
			Average Monthly	Maximum Daily
Copper, total recoverable	µg/L	28	90	130
Cyanide, total (as CN)	µg/L	37	73	150
Zinc, total recoverable	µg/L	150	920	1500
Ammonia Nitrogen, total (as N)	mg/L	14	25	48
Diazinon	µg/L	0.42	0.55	1.6

As a result of allowing dilutions credits in the determination of water quality based effluent limits for the protection of aquatic life, the District will be able to immediately comply with effluent limits for copper, cyanide, zinc, ammonia and diazinon, as shown in Table 1 above, thus

1) Eliminating the need for these parameters to be included in the Tentative Time Schedule Order,

2) The requirement of interim limits for any of these parameters to be included in the Tentative Order, and

3) The requirement for the District to develop and implement pollution prevention plans for these parameters.

The District proposes that the effluent limits presented in Table 1 be included in the Tentative Order for the discharge of secondary treated effluent to the North Fork Calaveras River during conditions where dilution ratio of 20:1 or greater is available. With the inclusion of the water quality based effluent limits based on the allowance of a dilution credit of 19, the District also proposes that copper, cyanide and zinc be removed from the Tentative Time Schedule Order, interim limits for and time schedule for ammonia and diazinon be removed from the Tentative Order, and pollution prevention plan requirements for ammonia and diazinon be removed from the Tentative Order.

With a dilution ratio of 20:1, a numeric toxicity limit of > 1 TUc is no longer appropriate. The District proposes that the numeric toxicity monitoring trigger be set at 10 TUc for consistency with precedent set in recently adopted Central Valley Water Board orders that allow dilution credits (e.g., Town of Discovery Bay).

Extension of Surface Water Discharge Season

As in the District's previous Order (No. R-5-2003-01151), the Tentative Order contains a prohibition of discharge to the North Fork Calaveras River from 1 May through 31 October. The District requested in the Report of Waste Discharge to extend the permitted period of surface water discharge to include 16 October through 31 May. Section IV.A.2 of Attachment F of the Tentative Order

specifies that the District must submit a report evaluating the use of the additional land disposal area (i.e., Neilson Property) as an alternative to extension of the surface water discharge season. This section further states that should the District submit an evaluation demonstrating that utilizing the additional land disposal does not mitigate the need for extension of the surface water discharge season, the Order may be reopened to modify the prohibition to extend the permitted period of surface water discharge.

The District has reviewed its water balances and preliminary geologic and hydrogeologic investigations of the Neilson Property. Thought there is ample field evidence that an effluent discharge to North Fork Calaveras River will be necessary under very wet May conditions when North Fork Calaveras River flows are high and area soils are saturated, the District agrees with the Tentative Order that more field study of the Nielson Property and additional storage reservoir sites is appropriate before the discharge season is extended into May.

Flow Ratio Prohibition

The District's previous Order contained a prohibition of discharges of secondary treated effluent to the North Fork Calaveras River in quantities that would exceed a minimum of 20:1 dilution as a daily average. The District requested in the Report of Waste Discharge that upon completion of upgrades to the Facility to provide tertiary level treatment the discharge prohibition be changed from 20:1 for secondary treated effluent to 10:1 for tertiary treated effluent. The District recognized that the Tentative Order contains a reopener provision for this issue. However, in an effort to minimize use of both District and Water Board resources, which would be required to reopen the Order within two years of adoption, the District proposes that allowance of 10:1 tertiary treated effluent discharge limits be included in the Tentative Order. In other words, simply include one set of requirements and limits applicable to secondary treated effluent surface water discharges and a second set of effluent limits that go into effect only after the completion of tertiary treatment improvements. Proposed effluent limits, based on a dilution ratio of 10:1 (D=9) are provided in Table 2 below.

Table 2
Proposed Concentration Based Tertiary Treatment Effluent Limits (with 10:1 dilution)

		Effluent Limitations	
Parameter	Units	Average Monthly	Maximum Daily
Copper, total recoverable	µg/L	46	64
Cyanide, total (as CN)	µg/L	37	74
Zinc, total recoverable	µg/L	460	750
Ammonia Nitrogen, total (as N)	mg/L	12	24
Diazinon	µg/L	0.28	0.80

Bis(2-ethylhexyl)phthalate Effluent Limits

The Tentative Order includes bis(2-ethylhexyl)phthalate effluent limits of 25 ug/L as an average monthly limit and 68 ug/L as a maximum daily limit. Because North Fork Calaveras River bis(2-ethylhexyl)phthalate concentrations were non-detect during sampling events conducted 2 May 2007 and 2 January 2008, bis(2-ethylhexyl)phthalate water quality based effluent limits were calculated using the Caltest Analytical Laboratory method detection limit of 0.6 µg/L (Tentative Order Table F-

7). A sample collected 2 January 2008 was also analyzed for bis(2-ethylhexyl)phthalate by CRG Marine Laboratories and reported as non-detect with a method detection limit of 0.1 µg/L (lab report included as Attachment C to this letter). The CRG non-detected bis(2-ethylhexyl)phthalate result provides evidence that the North Fork Calaveras River has more assimilative capacity than was considered in determining the bis(2-ethylhexyl)phthalate water quality based effluent limits included in the Tentative Order. The District requests that bis(2-ethylhexyl)phthalate effluent limits be recalculated using the appropriate maximum background concentration of 0.1 µg/L, which provides effluent limits of 34 ug/L as an average monthly limit and 95 ug/L as a maximum daily limit. Given that the District has a maximum effluent concentration (MEC) for bis(2-ethylhexyl)phthalate of 55µg/L, revision of these limits is appropriate and necessary.

DLDA Operating Requirements

In the Provision VI.B.4.a.ii of the Tentative Order, the maximum daily discharge to the Designated Land Disposal Area (DLDA) is limited to 0.9 MGD as a daily maximum. This limit is held over from the District's previous Order, and represents the hydraulic design capacity of the trickling filter. The limit of 0.9 MGD is no longer an applicable limit for discharge to the DLDA as the Facility now contains redundancy features, which were not in place at the time of adoption of the previous Order. Under its current configuration, the facility has the capability to discharge up to 1.8 MGD to the DLDA: 1.5 MGD through the new treatment process and up to 0.3 MGD through the High Flow Treatment System (HFTS). Therefore, the District proposes that the maximum daily discharge limit to the DLDA be 1.8 MGD.

Flow Increase Request

In Report of Waste Discharge, the District indicated that, as a part of the proposed upgrades to the Facility to provide tertiary treatment, the District plans to increase the peak flow capacity to 1.9 MGD. However, during the time of the preparation of the Report of Waste Discharge, the final design of Facility upgrades was not complete. The final design of Facility upgrades is now complete and does not include a peak flow capacity for the tertiary treatment process above the 1.5 MGD limit included in the Tentative Order. Therefore, the District does not plan to increase the peak flow discharge capacity to North Fork Calaveras River to 1.9 MGD as part of the proposed upgrades to the Facility as indicated in the Report of Waste Discharge. The flow capacity limit to North Fork Calaveras River of 1.5 MGD included in the Tentative Order is adequate, even after the completion of Facility upgrades to provide tertiary treatment. The HFTS will remain operational to handle influent flows in excess of the capacity of the Facility. As noted in the Report of Waste Discharge and the current Order, the HFTS discharges only to Pond D. Because there are no plans for a flow capacity increase, an antidegradation analysis is not required.

Summary

The District appreciates Water Board staff's consideration of the proposed modifications to the Tentative Order. Please keep the District appraised of the status of the Tentative Order and any revisions you may make based on these comments and comments you may have received from other parties. If hearing of the District's Tentative Order cannot be continued to allow public comment on the foregoing requested and needed revisions, then the Tentative Order will almost certainly be contested by the District in need of the revisions as requested in the Report of Waste Discharge, or by interested parties claiming there was insufficient time to review the revisions and provide meaningful comment at the hearing. To the extent practicable, we would like to coordinate the District's testimony with that of Water Board staff, should the permit be contested.

Call if you have questions about our comments, or you need further information.

Sincerely,

Steve Schimp,
District Manager
San Andreas Sanitary District